Join us on the second Thursday of every month for a series of "brown bag" seminars sponsored by the National Renewable Energy Laboratory and the U.S. Department of Energy. Each seminar is held at NREL's Washington offices with a videoconference link to Golden, Colorado. Topics focus on new and innovative renewable energy and energy analysis strategies, models, and technologies.

Energy Analysis Seminar Series

A "brown bag" analytical seminar series

Hybrid Optimization Model for Electric Renewables—The Latest on HOMER

Peter Lilienthal
National Renewable Energy Laboratory
Thursday, January 10
Noon–1 p.m.

Peter Lilienthal, of NREL's Energy and Environmental Analysis Office, will present the Laboratory's latest version of the Hybrid Optimization Model for Electric Renewables (HOMER). More than 1,300 energy analysts in 110 countries have used HOMER for remote power and rural electrification program planning and project analysis. Although the program traditionally has focused on off-grid distributed power systems, it is now being enhanced to handle grid-connected systems. HOMER identifies the least-cost system for particular applications by simulating the hourly performance of thousands of different systems and ranking them by net present cost. It can look at combinations of photovoltaics, wind, batteries, micro-hydro, and any type of engine-generator (reciprocating engines, micro-turbines, or fuel cells) powered by any fuel, including biomass. Sensitivity analyses, which can be performed automatically for uncertain variables, also are useful to identify the cost-effective market niches for specific technologies or the market impacts of policy instruments.

Peter Lilienthal has been with the National Renewable Energy Laboratory since February 1990. Lilienthal, who is a senior economist with the International Programs Office, has a Ph.D. in engineering-economic systems from Stanford University. He has been active in the field of renewable energy and conservation since 1978, which has included designing and teaching courses at the university level, project development of independent power projects, and consulting to industry and regulators. His technical expertise is in utility modeling and the economic and financial analysis of small power projects. He is the developer of NREL's Village Power Optimization Software, HOMER, and ViPOR, and is the lead analyst for NREL's International and Village Power Program.

370 L' Enfant Promenade is located adjacent to the Forrestal building at 901 D Street SW in downtown Washington (Aerospace Building). Please contact Wanda Addison at NREL at 202-646-5278 or wanda_addison@nrel.gov

For more information on NREL, please visit the NREL Web site at *http://www.nrel.gov/*